

AMENDMENTS TO THE CLAIMS

1-29. (Cancelled)

30. (New) A method for treating Alzheimer's disease, comprising administering an adeno-associated virus vector in a therapeutically effective amount to a subject whereby the concentration of TGF- β in the blood of the subject is reduced, wherein the adeno-associated virus vector comprises DNA encoding a β -amyloid peptide and DNA encoding a signal peptide capable of extracellularly secreting said β -amyloid peptide, in an operative form.

31. (New) The method according to claim 30, wherein the β -amyloid peptide is expressed in intestinal cells by the adeno-associated virus vector.

32. (New) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acids 4 to 10 of the amino acid sequence as shown in SEQ ID NO: 2.

33. (New) The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotides 10 to 30 of the nucleotide sequence as shown in SEQ ID NO: 1.

34. (New) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 2.

35. (New) The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 1.

36. (New) The method according to claim 30, wherein said β -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 4.

37. (New) The method according to claim 30, wherein the DNA encoding said β -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 3.

38. (New) The method according to claim 30, wherein said signal peptide is a signal peptide of amyloid precursor protein.

39. (New) The method according to claim 30, wherein said signal peptide comprises the amino acid sequence as shown in SEQ ID NO: 6.

40. (New) The method according to claim 30, wherein the DNA encoding said signal peptide comprises the nucleotide sequence as shown in SEQ ID NO: 5.

41. (New) The method according to claims 30, said administering is orally administering.